



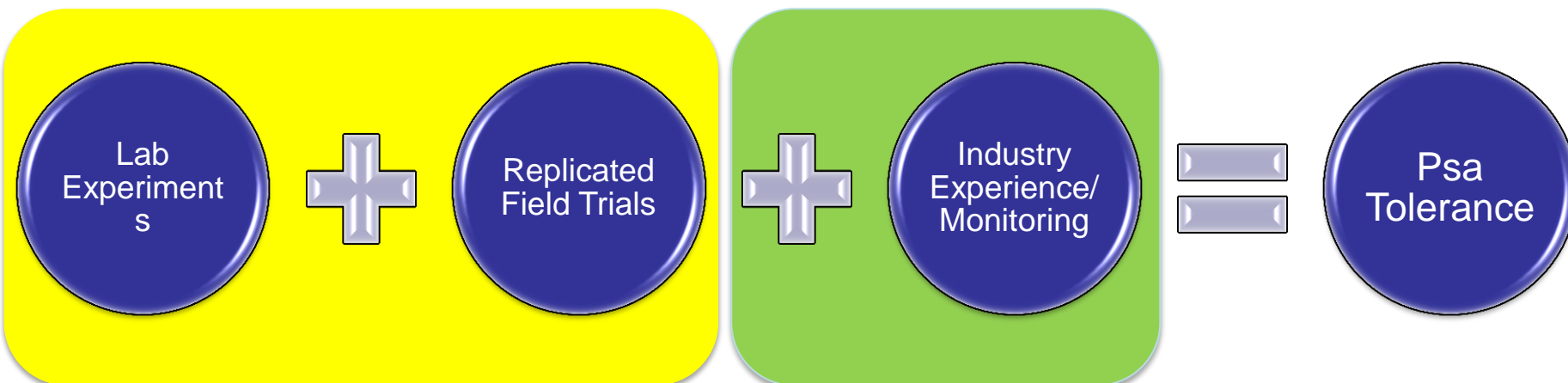
# PSA TOLERANCE OF NEW VARIETIES 'N FIELD OBSERVATIONS



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Supply and Demand Attributes of Variety

## **A. Context**

## **B. New Variety Monitoring Programmes (focused in the Te Puke priority zone):**

- 1. Can we establish under high inoculum pressure?**
- 2. How tolerant is Gold3 under high inoculum pressure?**
- 3. What is the speed of symptom progression through blocks under high inoculum pressure?**

## **C. Summary – to date, what can we conclude?**

# CONTEXT (In Field Observations)

## Weaknesses

- Lack of Comparability
- Lack of Consistency
- Lack of Complete Data

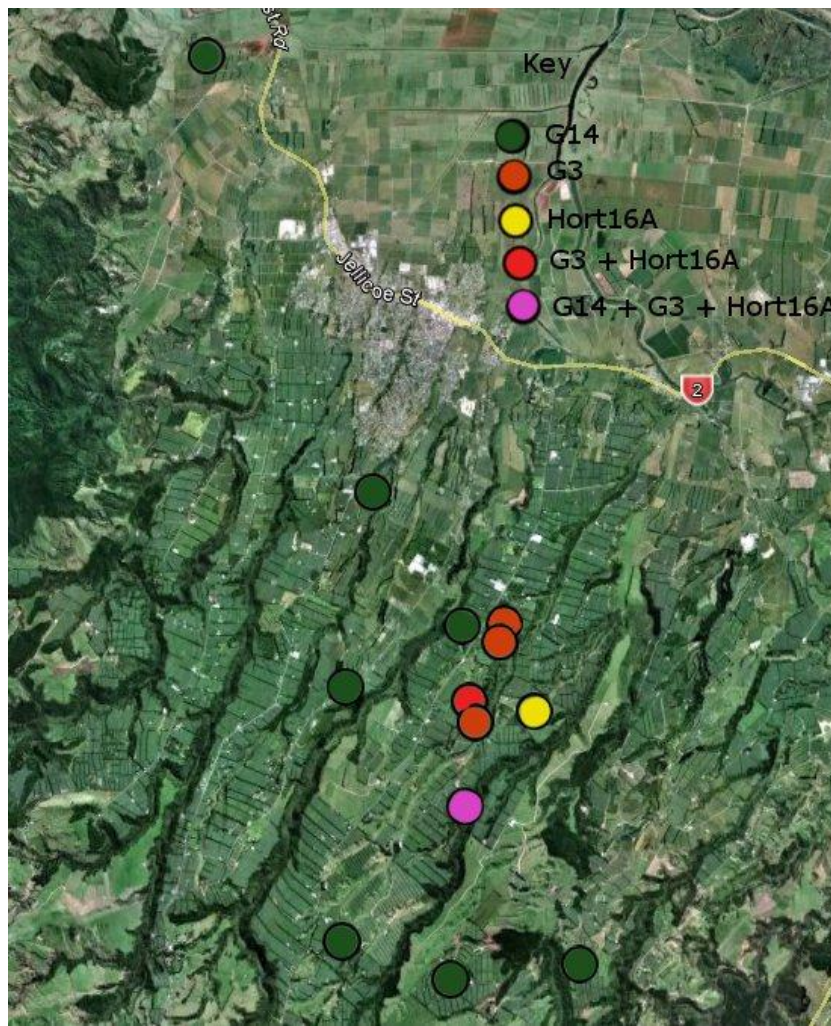
## Strengths

- “Real World”
- Large Datasets

# RESULTS FROM NEW VARIETY MONITORING PROGRAMMES

# 1. ESTABLISHMENT *Background*

**QUANTIFY NEW GRAFT SUCCESS AND CURRENT LEVEL OF INFECTION  
ON ORCHARDS CUT-BACK DUE TO PSA**



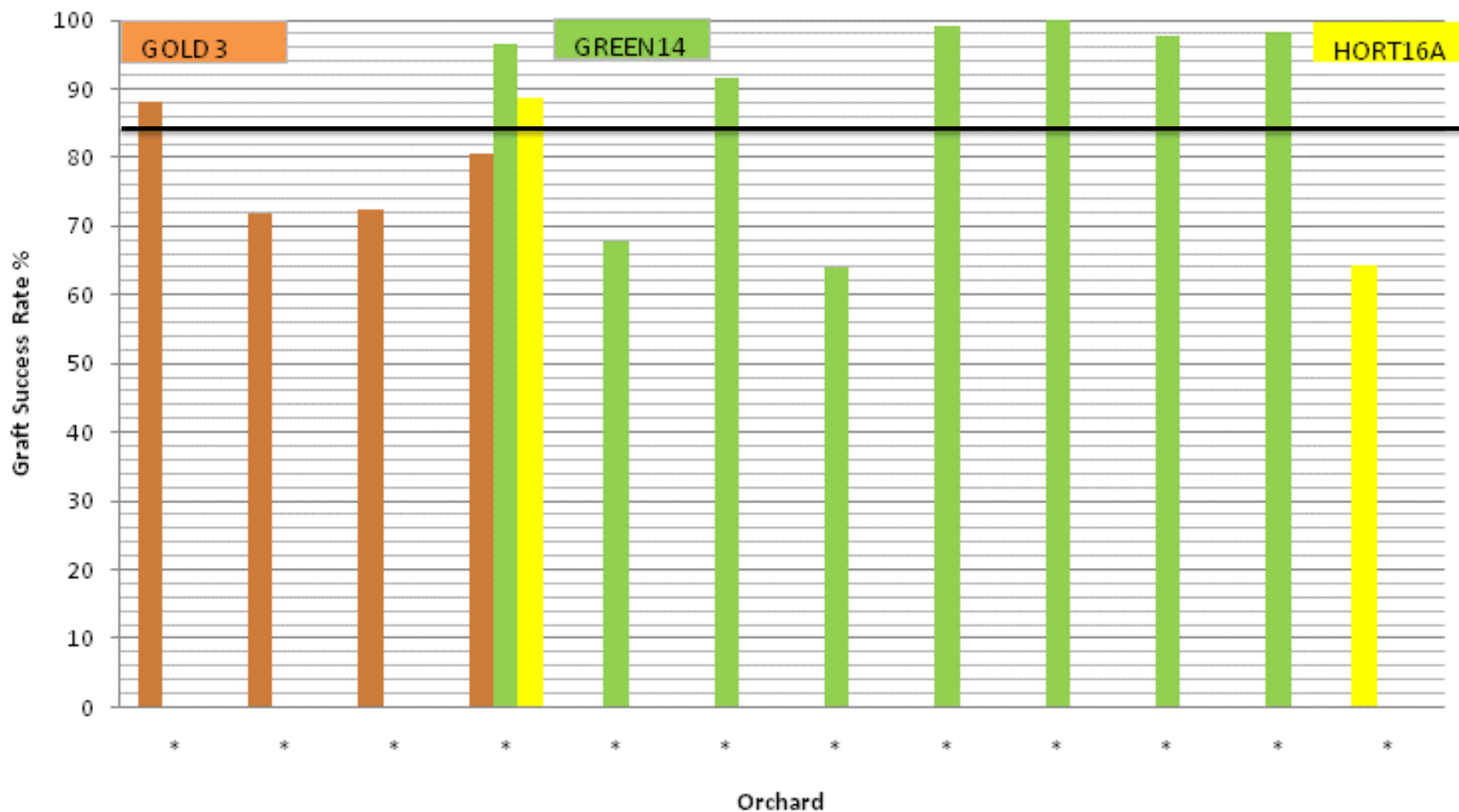


# 1. ESTABLISHMENT

## *Grafting Success*

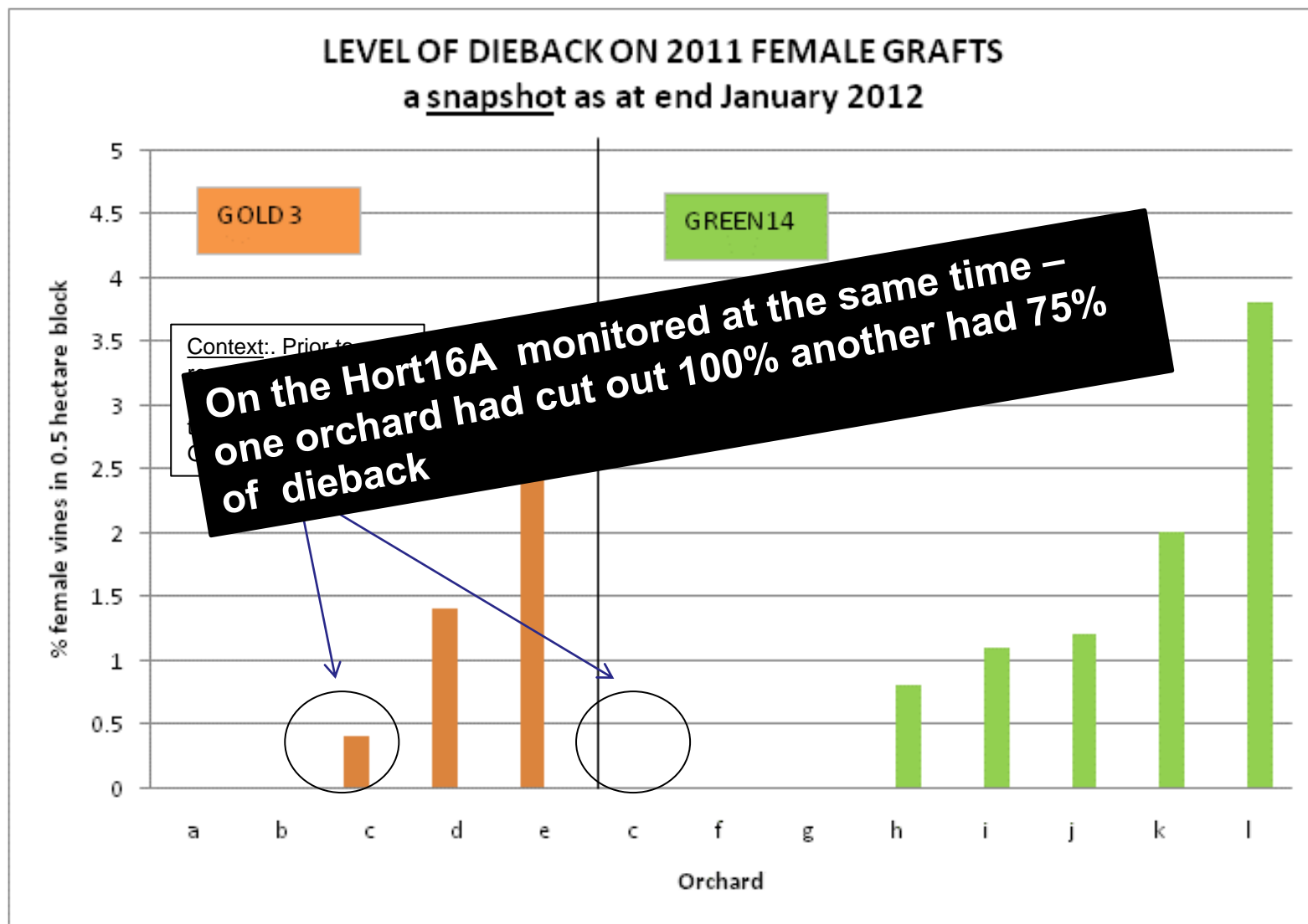
### Graft Success on Cut-Out Orchards

a snapshot as at end January 2012



# 1. ESTABLISHMENT

*Level of Infection: end Jan 2012*







# 1. ESTABLISHMENT

## *Ongoing Work*



## What about grafting at different times of the year?

### Smartkiwi Innovation Fund

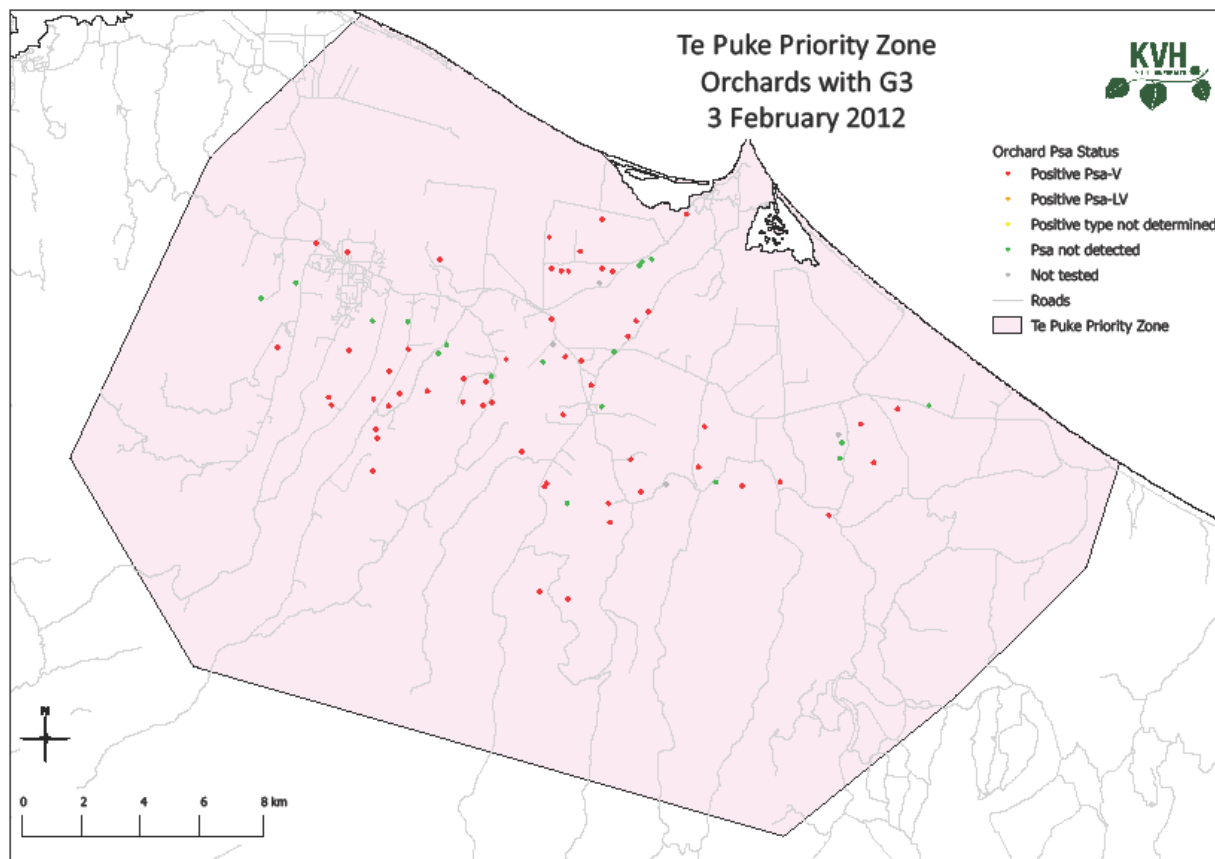
1. Can we establish the new cultivars and males successfully under high inoculum loads, and when is the best time to graft? (December 2011, January 2012, February 2012).

*also.....*

2. To evaluate the most successful summer grafting technique for G3 variety on Bruno stumps cut off due to Psa-V infection.

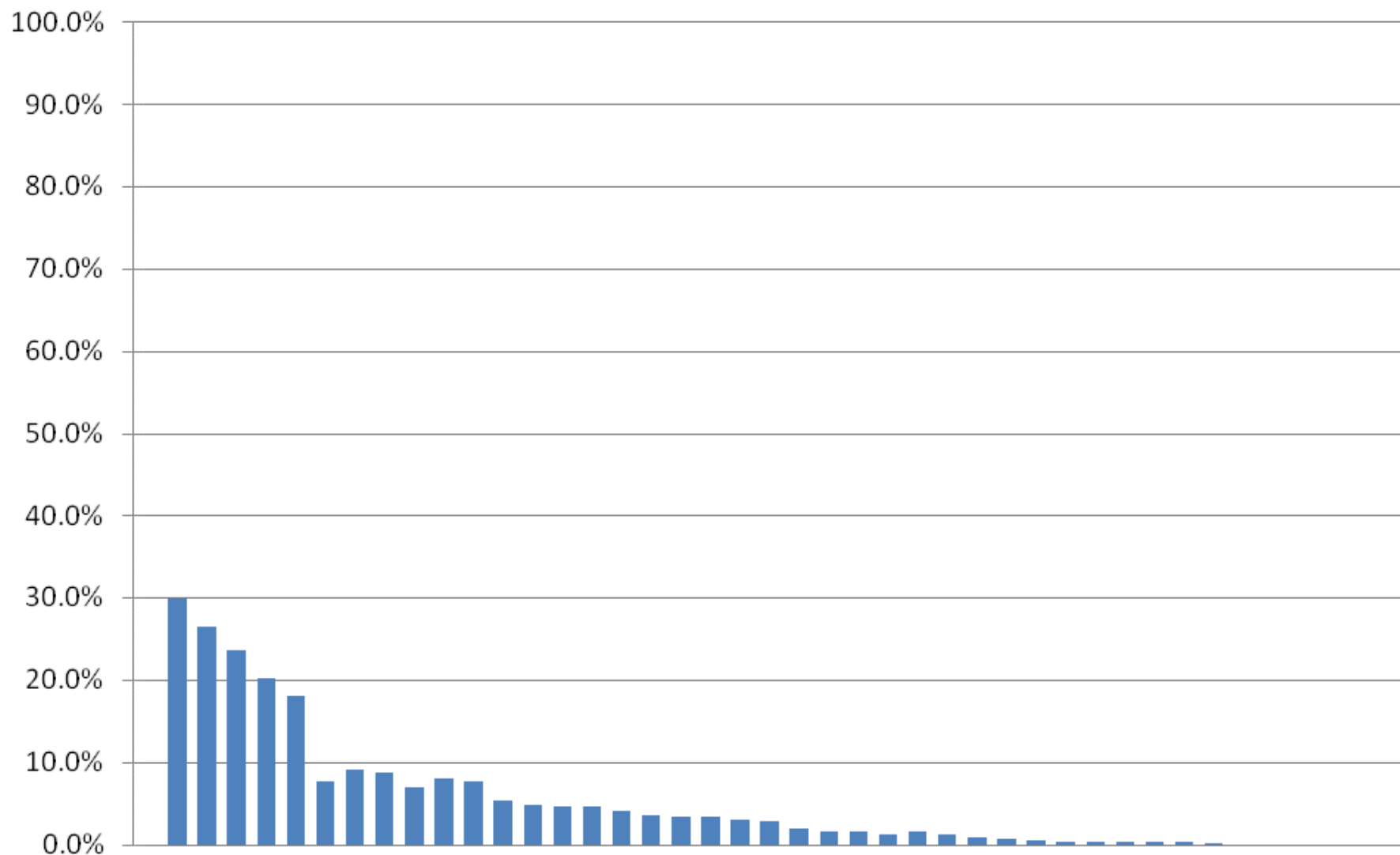
# 2. GOLD3 TOLERANCE Background

**AIM:**  
**SNAPSHOT OF PSA STATUS OF ALL G3 ORCHARDS IN THE TE PUKE  
PRIORITY ZONE**



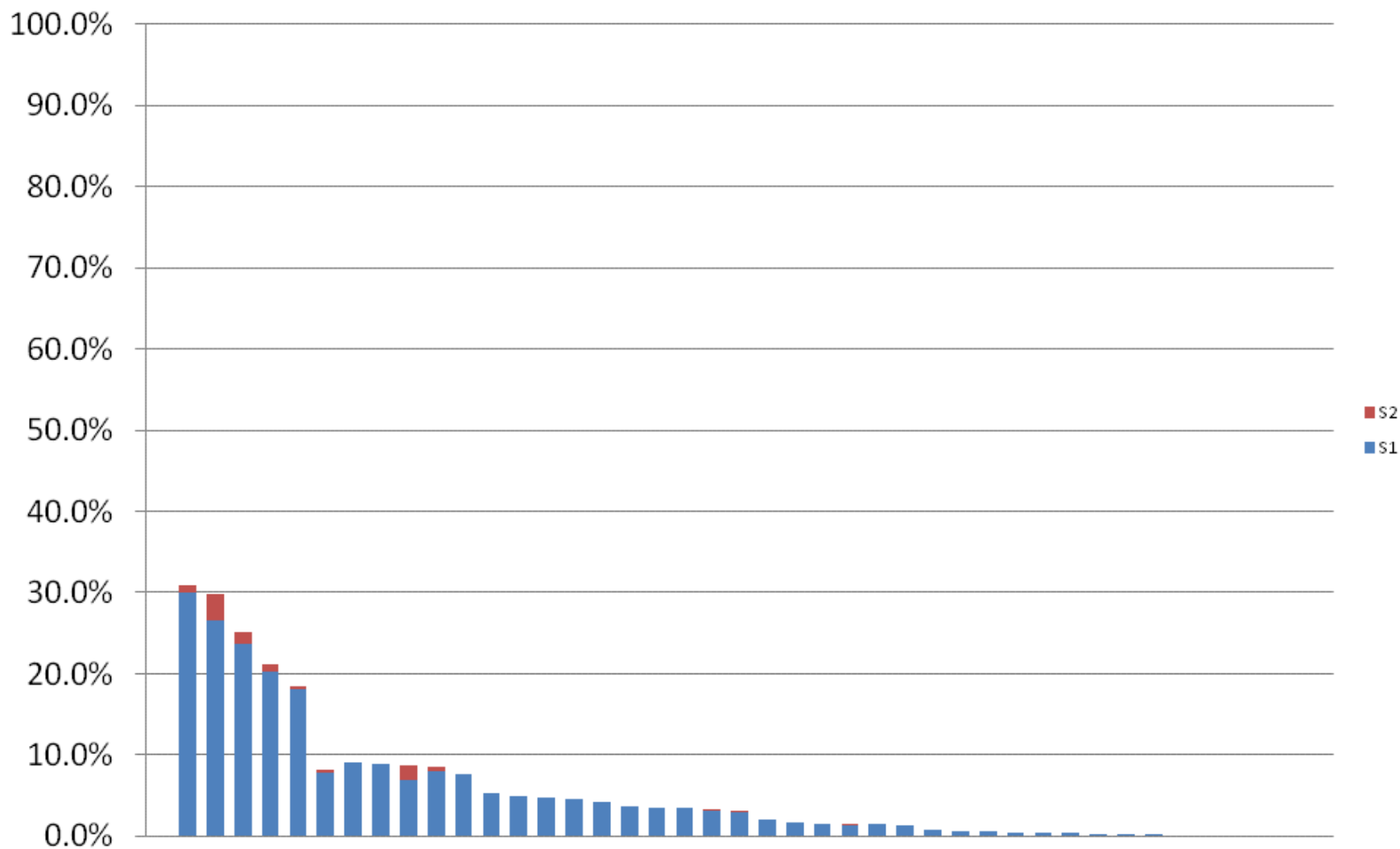
## 2. GOLD3 TOLERANCE

Gold3 Shoot die Back (1 or 2 per plant)



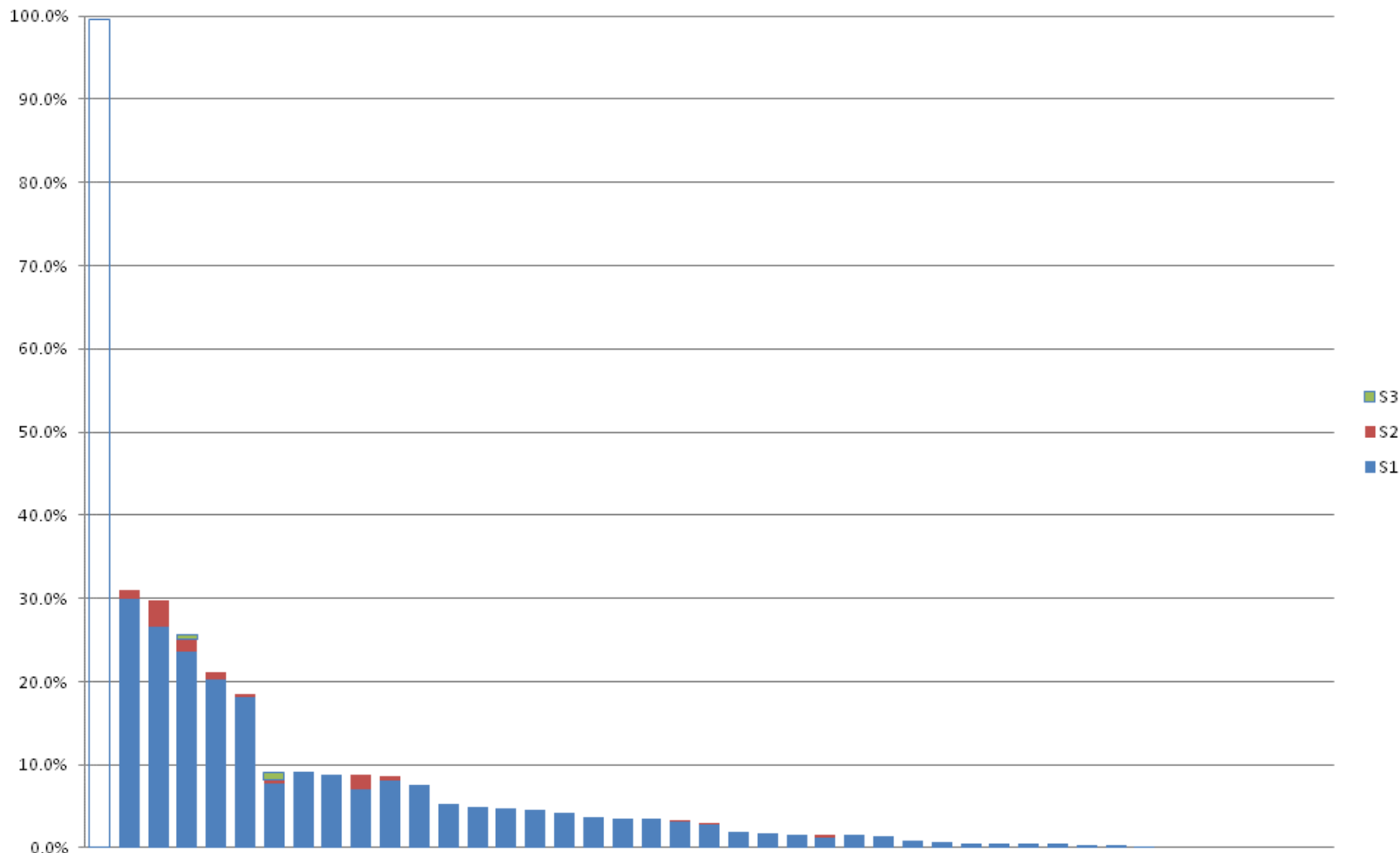
## 2. GOLD3 TOLERANCE

Shoot dieback (S1+S2, 3-5 per plant)



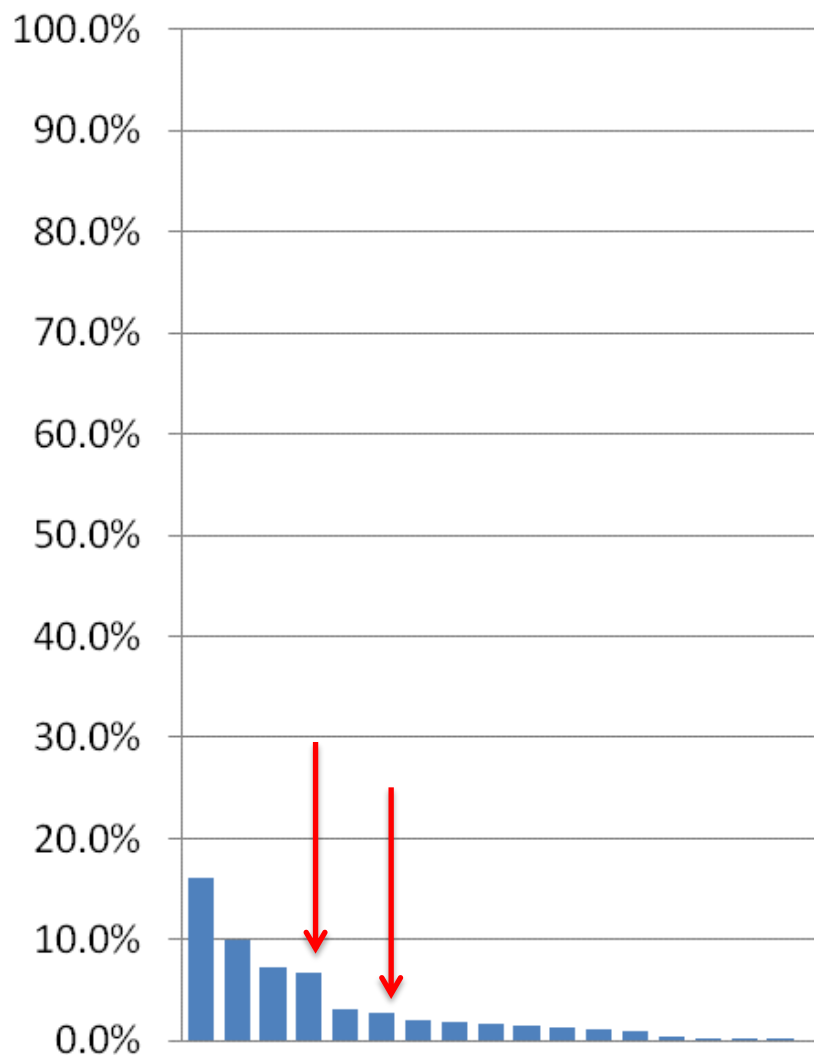
## 2. GOLD3 TOLERANCE

Gold 3 Shoot dieback (S1+S2+S3, 5 or more per plant)



## 2. GOLD3 TOLERANCE

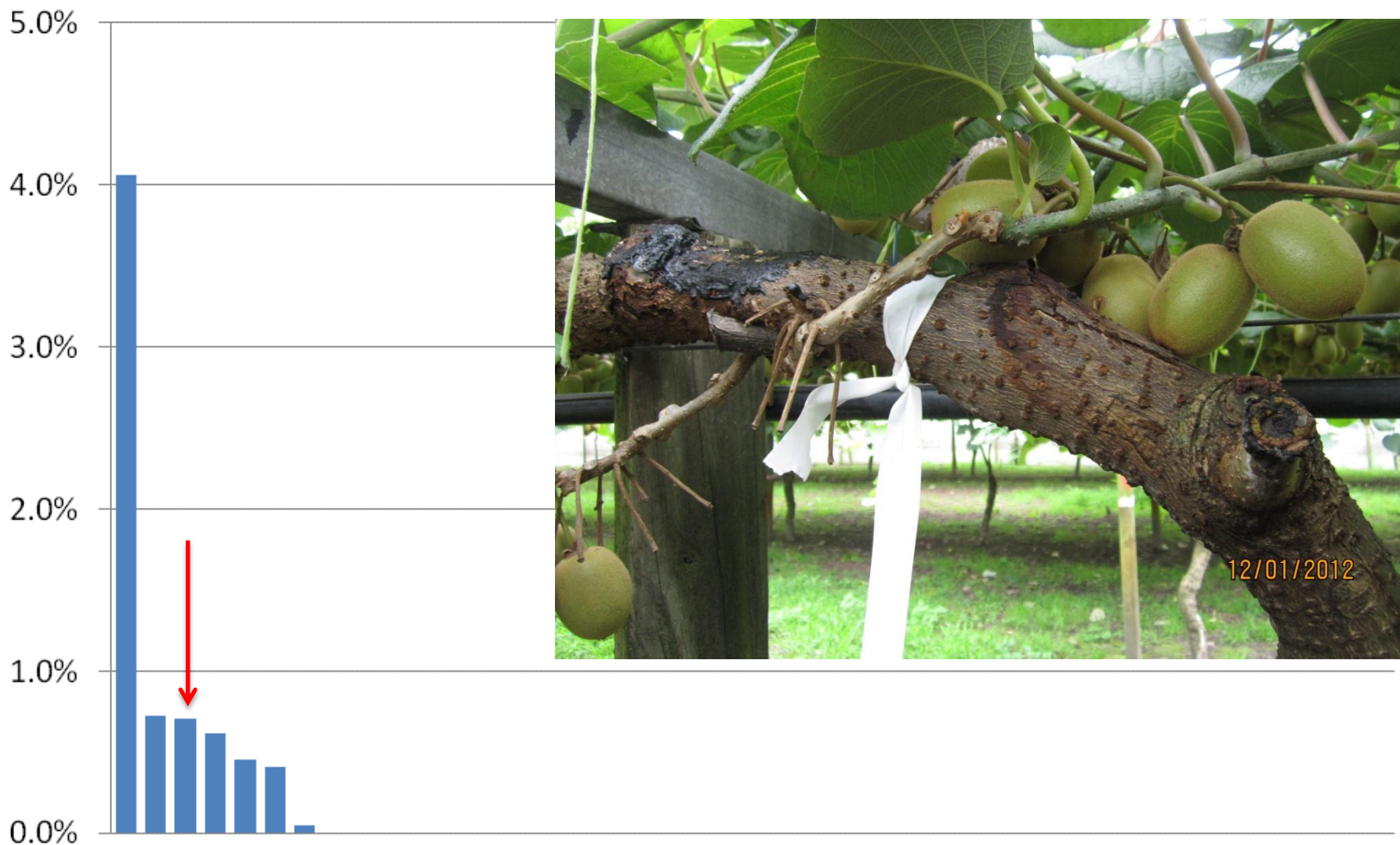
Gold3 Cane Dieback %





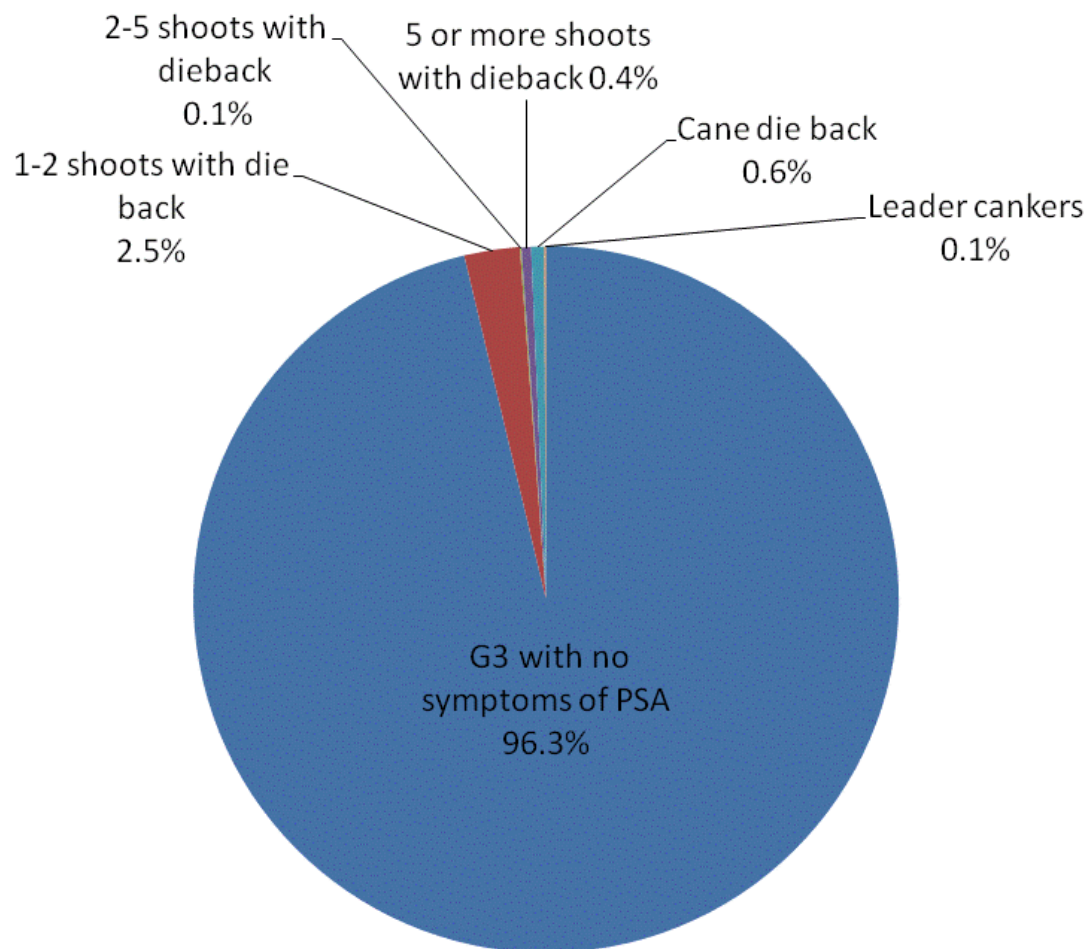
## 2. GOLD3 TOLERANCE

Gold 3 Leader Cankers



## 2. GOLD3 TOLERANCE Summary

Level of G3 symptoms on monitored plants





# 2. GOLD3 TOLERANCE

## *Examples*



# 3. SPEED OF PROGRESSION KVH

## *Background*

### **MONITOR THE RATE OF SYMPTOM EXPRESSION THROUGH “ESTABLISHED” NEW VARIETY BLOCKS**

- Five 0.5 hectare blocks each of Gold3, Gold9 and Green14 being monitored.
- Monitoring commenced 1<sup>st</sup> October 2011.
- All blocks were Psa undetected at that time.
- Distributed across the Te Puke priority zone.
- All fruiting female vines.

### 3. SPEED OF PROGRESSION KVH

## *% Blocks Infected*

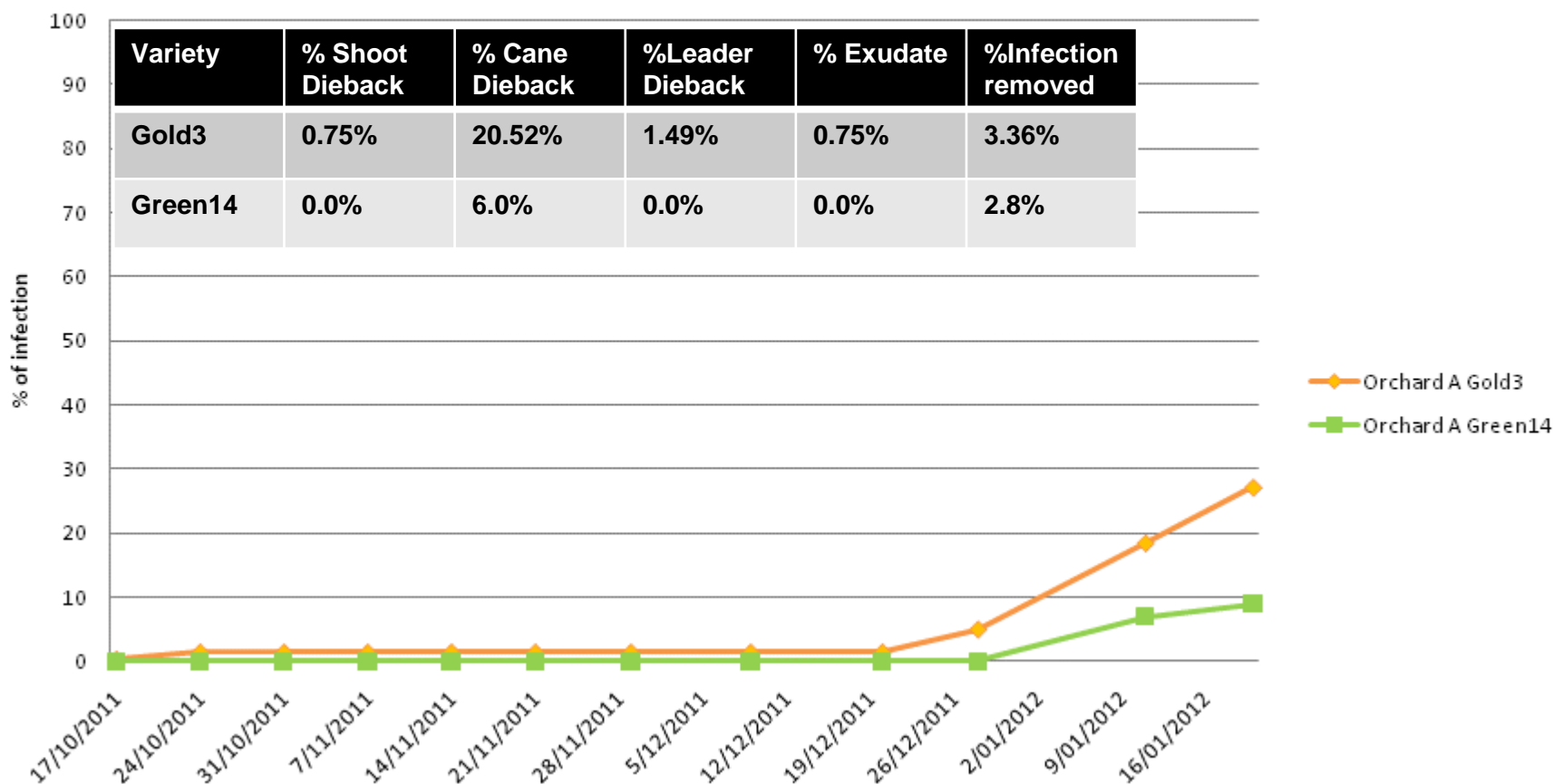


**For Gold3, Gold9 and Green14:  
2/5 of the blocks have, to date,  
tested positive for Psa.**

# 3. SPEED OF PROGRESSION KVH

## *Level of Infection*

Orchard A: Gold3 and Green14 level of infection  
progress over time

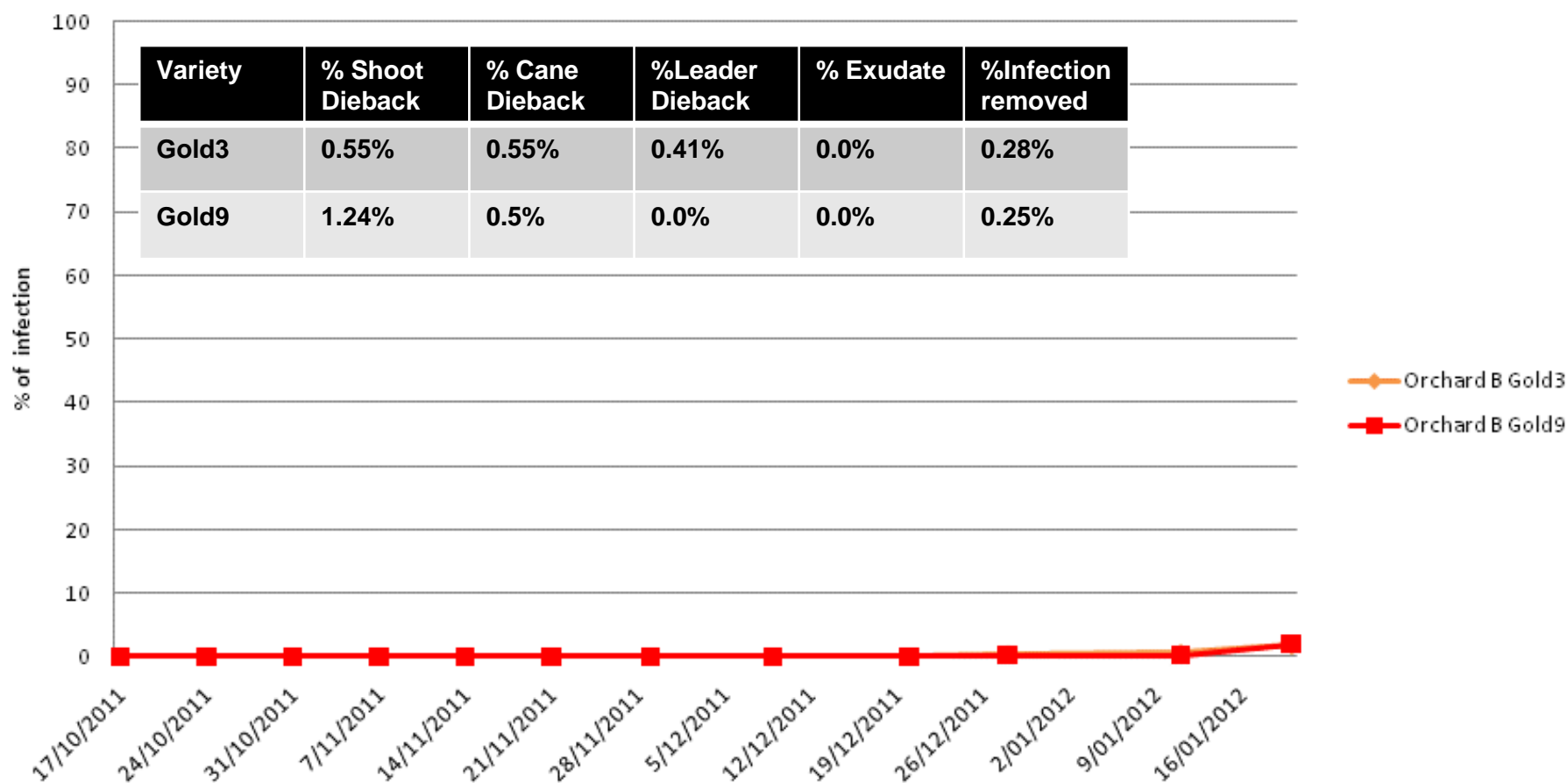




# 3. SPEED OF PROGRESSION KVH

## *Level of Infection*

Orchard B: Gold3 and Gold9 level of infection  
progress over time



# SUMMARY (T.H.M)

- To date, in general Gold3, Gold9 and Green14 are establishing and holding up well to Psa; relative to what was seen with Hort16A.
- However, although all these varieties appear to have a degree of tolerance they will require some level of intervention.

Inoculum load, sprays, vine management programmes and weather will all impact on Psa infection levels.

- Remembering.....

**THIS DATA IS A SNAPSHOT  
IN TIME – WORK  
CONTINUES.....**

